



GROUP
Safety Recall Campaign

MODEL
2013-2015MY
Optima (QF)
2014-2015MY
Sorento (XMa)

NUMBER
SC197 (Rev 2, 01/05/2021)

DATE
October 2020

SAFETY RECALL CAMPAIGN

HECU/ABS MODULE PARASITIC CURRENT DRAW TEST AND REPLACEMENT (SC197)

* NOTICE

This bulletin has been revised to include additional information. New/revised section of this bulletin are indicated by a black bar in the margin area.

This bulletin provides the procedure to inspect and, if necessary, replace the Hydraulic Electronic Control Unit (HECU) on some 2013-2015MY Optima (QF) vehicles produced from July 12, 2013 through October 2, 2015 and some 2014-2015MY Sorento (XMa) vehicles produced from June 17, 2013 through December 11, 2014. Brake fluid may leak internally inside the Hydraulic Electronic Control Unit (HECU) which, over time, can result in an electrical short. An electrical short in the HECU increases the risk of an engine compartment fire.

Dealers are to have technicians measure the Anti-Lock Brake System (ABS) circuit in the fuse box for parasitic current draw. If the current draw is $>70\mu\text{A}$, then the HECU assembly should be replaced due to possible internal damage caused by an internal fluid leak. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

* NOTICE

A Techline case number is required for all part orders to confirm the actual microamp draw is present at time of vehicle inspection prior to the part order.



* NOTICE

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

* NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

Test Procedure:

❗ IMPORTANT

This test procedure must be performed with the ignition 'OFF'. (DO NOT 'START' the engine at any time during the test procedure.)

- Use the SST Multimeter to measure the parasitic current draw only (Do not use for any other purposes). Ensure the SST has a good 9V battery installed.
- Parasitic draw must be measured for at least 15sec, in order to record a constant value.

Setting the SST Multimeter:

1. Connect two (2) lead wires (red and black) to the SST.

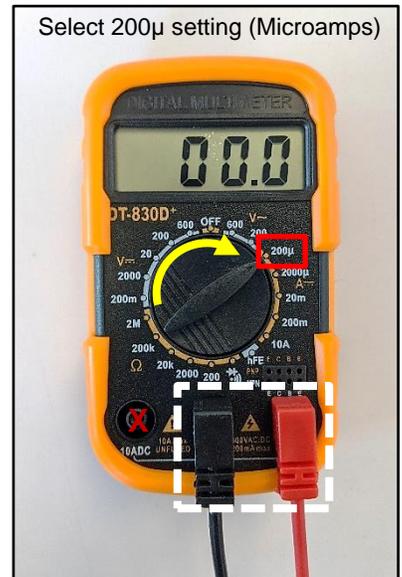
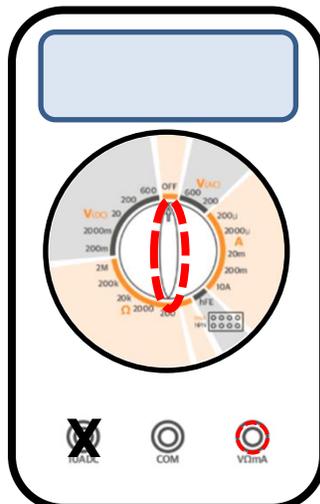
Black Ground (-) lead wire; connect to COM
Positive (+) lead wire; connect to VΩmA.



2. Turn the selection knob to the right and set it to **200uA**.

Reading Microamps:

Meter Setting	Displayed Value
200uA	0 - 200
2000uA	DO NOT USE
10A	DO NOT USE



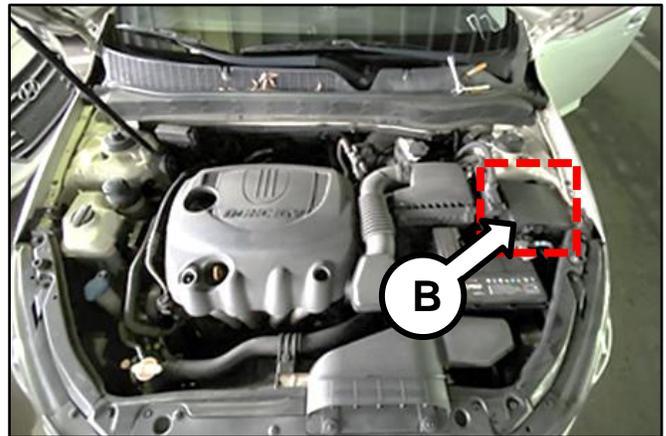
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Test Procedure:

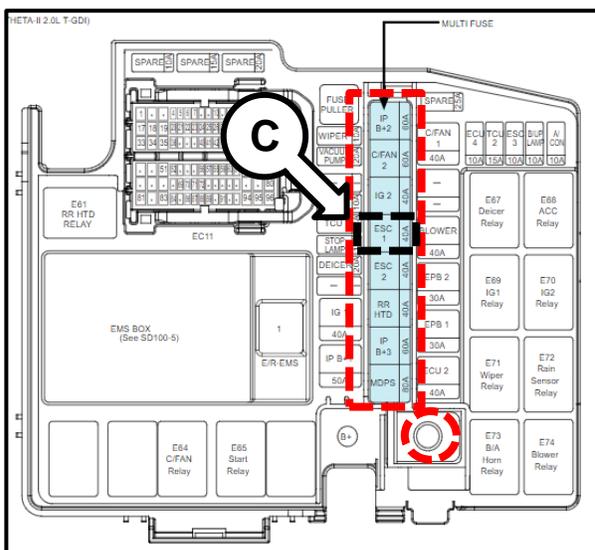
1. Open the hood and disconnect the battery negative (-) terminal (A).



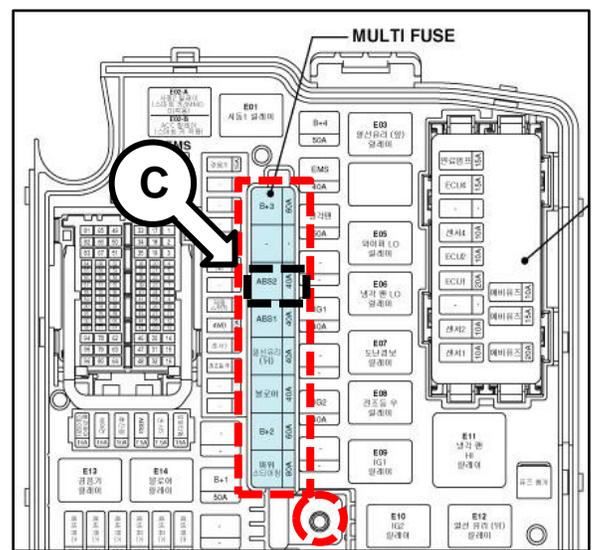
2. Remove the fuse box cover (B).



3. Locate the Multi-Fuse (C) ESC1 for (QF) Optima or ABS2 (XMa) Sorento 40A in the fuse box.



Optima (QF)



Sorento (XMa)



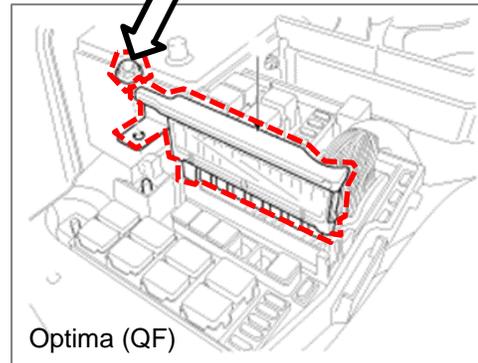
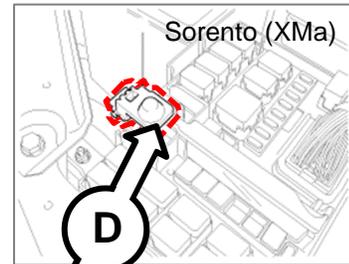
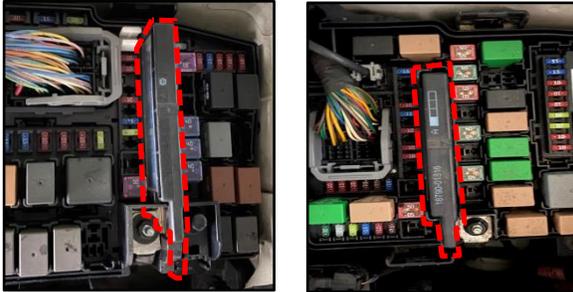
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4. Loosen the 10mm Multi-Fuse retaining nut (D) and remove the Multi-Fuse.

Note: **Optima (QF) ONLY**, remove the nut cover first.

Sorento (XMA) ONLY, after removing the fuse, re-attach the 12VDC cable to the fuse box, and temporarily re-install the Multi-Fuse 10mm nut.



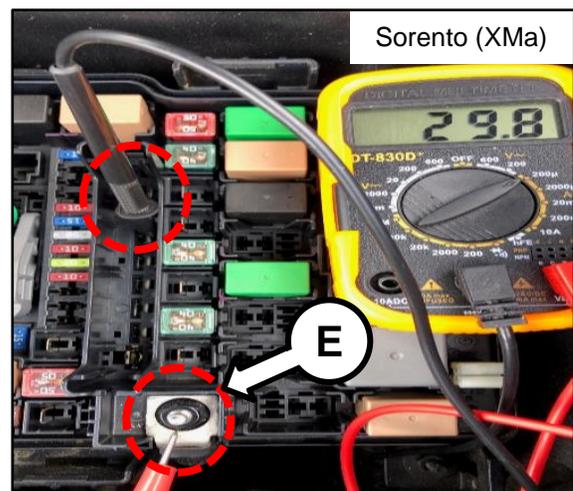
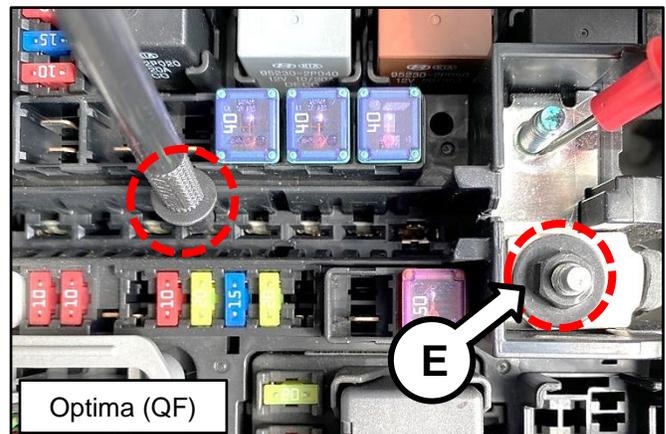
5. Re-connect the negative (-) battery terminal.

- 6a. Using the two (2) SST Multimeter jumper leads, **carefully** contact the **'black'** lead to the **'ESC1' (QF) OR 'ABS2' (XMa)** fuse terminal and the **'red'** lead to the fuse box **'Positive' (E) post**.

- 6b. **Measure the Multimeter value/reading for at least 15 seconds.** **Note:** The current draw value **must stay constant.** **DO NOT** damage the terminals.

If current draw value is OVER 70uA or 0.070mA, open a Techline case prior to part order, all part orders are on manual allocation. Replace the Hydraulic Electronic Control unit (HECU) by referring to the "Brake System → ESC (Electronic Stability Control) System → ESC Control Module → Repair procedures" chapter in the applicable Shop Manual on KGIS.

If current draw value is BELOW 70uA or .070mA, no further action is required. Reinstall the removed parts in the reverse order of removal.



★ NOTICE

All parts replaced are subject to return to the Warranty Parts Return Center (WPRC) for verification of the reported parasitic draw.

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AFFECTED VEHICLE RANGE:

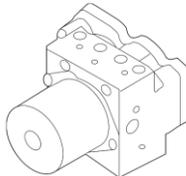
Model	Production Date Range
Optima (QF)	July 12, 2013 to October 2, 2015
Sorento (XMa)	June 17, 2013 to December 11, 2014

REQUIRED TOOL:

Tool Name	Figure	Qty.	Comments
Multimeter DT-830D		1	Only one (1) multimeter was auto shipped to each dealer by MPA, P/N: KQ589 4C100QQK. <u>Additional warrantable concerns will be handled by Snap-On Business Solutions*.</u>

* Call Snap-on Business Solutions at (888) 542-1011 for lead replacements or defective meter.

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
HECU Assembly* (XMa)	58920 1U000QQK		1
HECU Assembly* (QF)	58920 4C550QQK 58920 4C870QQK 58920 2T550QQK 58920 2T870QQK		*Techline case will be required prior to part order.

WARRANTY INFORMATION:

N Code: N99 C Code: C99

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
XMa	R	58920 1U000	0	(SC197) HECU Inspection/Test	201A18I0	0.3 M/H	N/A	0
				(SC197) HECU Test and Replacement	201A18R0	2.1 M/H	58920 1U000QQK	1
QF		58920 4C550		(SC197) HECU Inspection/Test	201A18I1	0.3 M/H	N/A	0
				(SC197) HECU Test and Replacement	201A18R1	2.0 M/H	58920 4C550QQK*	1
	58920 4C870QQK*							
58920 2T550QQK*								
58920 2T870QQK*								

*Note: Only one (1) applicable HECU Replacement P/N can be claimed for QF model. Refer to Warranty Bulletin 2020-24 for claim submission procedures. Use sublet code X1 for reimbursement for Kia Brake Fluid P/N: UM010 CH043, DOT 4 (\$9 maximum).

Labor Op Codes have been revised due to audio presets and reprogramming is not required.

*** NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC197 when accessing the WebDCS system.

